

FIG. 1

V_{fb} (V) vs. TOX (Å) for Al/20Å TiN Gate

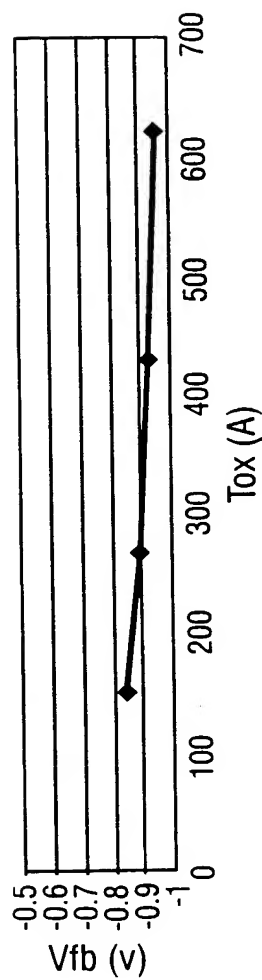


FIG. 2

Work-Function of Al/TiN Gate Changes
as the thickness of thin TiN changes

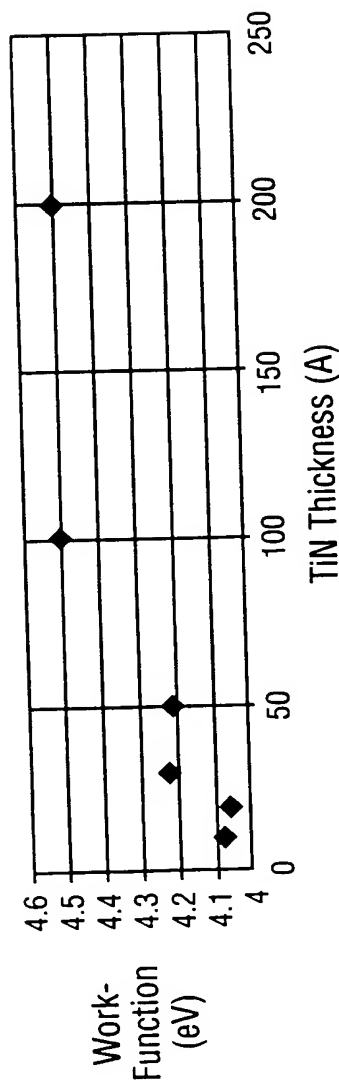


FIG. 3

V_t (v) for various gate stack with different TiN thickness

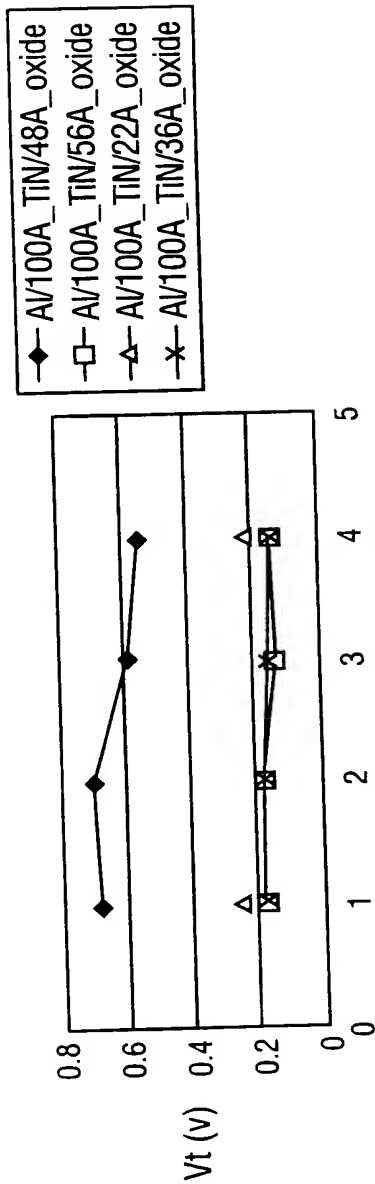


FIG. 4

(2=0.5μm 2=0.45μm 3=0.35μm 4=0.3μm)

Gate Leakage (Am p/cm 2) vs. Gate Voltage (V)
 $T_{ox} = 22\text{\AA}$

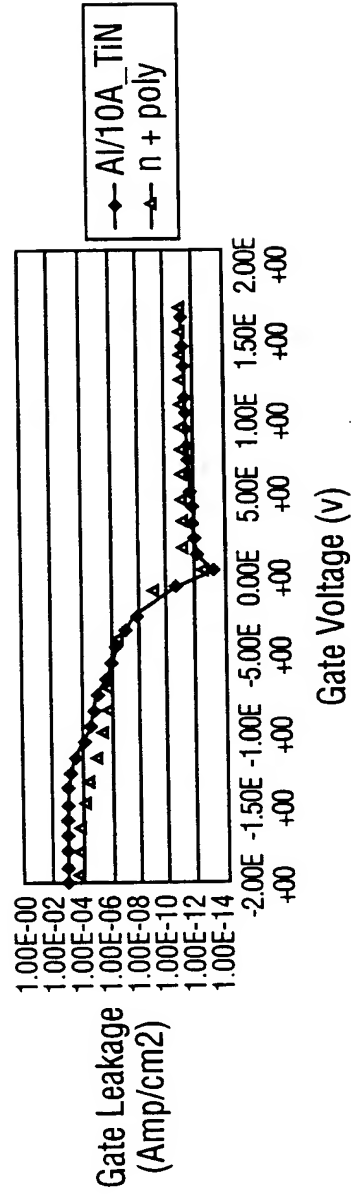


FIG. 5

QuasiStatic/High Frequency Capacitor Voltage
Curves for A1/20 A_TiN/50A Oxide
Gate Stack

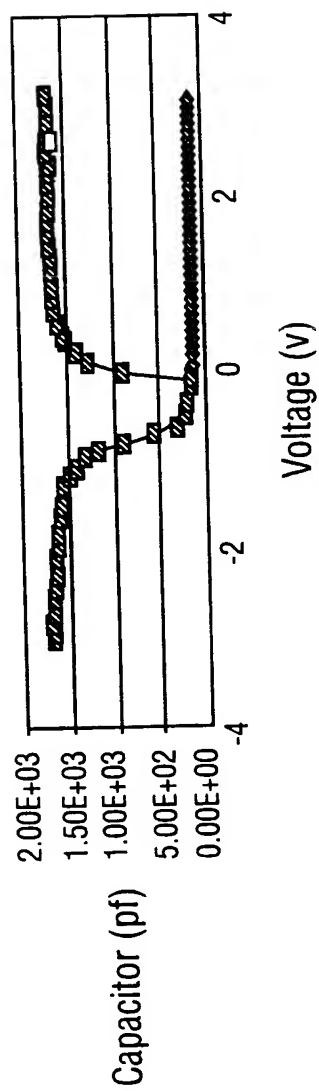


FIG. 6

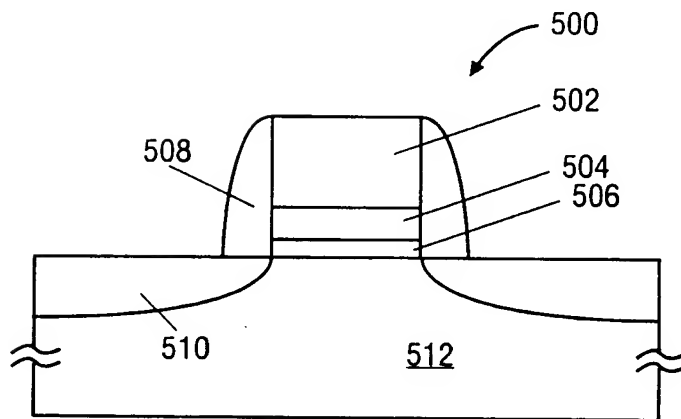


FIG. 7

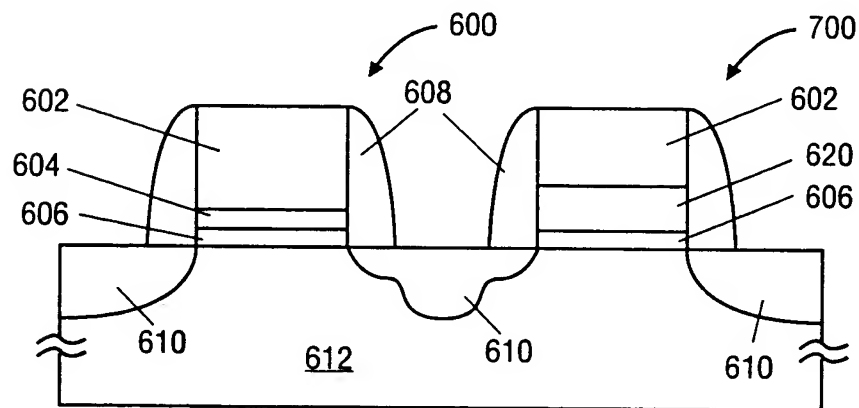


FIG. 8